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ABSTRACT

To maintain the current level of educational services for pregnant and parenting adolescents in California, 800 more openings will be needed by 1992. The increase will be necessary to accommodate the state's youngest mothers' (those from 14 to 15 years old) increasing birth rate. A telephone survey, conducted in December 1986 and January 1987, of 144 head teachers or program managers of California's 247 teen mother education programs was undertaken to identify the types of existing programs, to solicit suggestions for program improvement, and to assess the implementation costs of a comprehensive program. An additional mail survey of junior and senior high schools was conducted to estimate the numbers of pregnant or mothering teens and the associated dropout rates. Enrollment in classroom-oriented programs accounted for 61 percent of the teen mothers, while 30 percent attended pullout programs that mainstreamed the students but provided an additional special class or classes for one or more periods a day. Recommendations to improve teen mother educational programs include enhanced provision of childcare, additional support for transportation services, and expanding onsite counseling and health care. An appendix and nine tables are provided. (KM)

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Pregnant and Parenting Minors and California Schools

Helen H. Cagampang, William H. Gerritz, and Gerald C. Hayward

April 1987 (revised April 1989)

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Helen H. Cagampang, William H. Gerritz, and Gerald C. Hayward

April 1987 (revised April 1989)

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Policy Analysis for California Education (PACE)
Berkeley, California
April 1987 (Revised April 1989)

Executive Summary

This survey and analysis is part of a larger study, *A Study to Determine How to Organize and Expand Public School Programs to Reduce Dropout Rates for High Risk Students: Pregnant and Parenting Adolescents,* undertaken by the California Senate Office of Research and funded in part by the National Conference of State Legislators and the United States Office of Educational Research and Improvement. The Senate Office of Research contracted with Policy Analysis for California Education to examine existing secondary sources such as available records of the California State Department of Education and the California State Department of Health; to conduct a mail survey of junior and senior high schools to estimate the numbers of pregnant minors, adolescent mothers, and associated dropout rates; to conduct a telephone survey of unified and high school districts to identify existing programs, describe existing delivery systems, and solicit suggestions for program improvement; and to assess implementation costs of a comprehensive program.

Highlights of our findings include:

Program Types

Sixty-one percent of students enrolled in pregnant minor and teen mother programs are enrolled in *classroom-oriented programs* operated in either a comprehensive high school, a continuation high school, or at a dedicated site. Of these, over 80 percent are served in continuation schools or at dedicated sites.

The second most prevalent program type, *pull-out programs,* includes about 30 percent of the students, mainstreams students into academic classes, and provides a special class or classes for one or more periods per day. In these classes, which are generally housed in comprehensive or continuation high schools, pregnant students or students with children normally attend classes with regular students for all but one or two periods per day.

Educational Services

Virtually all respondents reported that their programs included *academic instruction, consumer education, nutrition education, child development education, child abuse prevention education, and family planning information.* A lesser, but still substantial number of programs (over 80 percent) reported providing *vocational or employment training and alcohol and drug abuse prevention information.* Slightly more than half of the programs include *education for fathers/boy friends.*

Health Services

Health services were also provided in most programs with *free breakfasts and/or lunches*

being provided to program participants in four of five programs. *Nutrition supplements* were made available to students participating in three of every four programs. In slightly over half of the programs students receive *prenatal medical care or medical care for the newborn.*

Counseling

Four in five programs offered *counseling with a credentialed counselor and home visits* as part of their program. *Support groups* were a feature of 72 percent of the programs. *Adoption counseling, peer counseling, and family-based counseling* were services provided in about half of the programs.

Transportation

A little over one-half of the programs provided *transportation to and from school* but only about one in six had *outreach programs* designed to identify eligible but unserved students.

Child Care

In programs serving teenage mothers, respondents reported that 71 percent of the programs offered child care services to all the students enrolled. Another 13 percent reported that although child care was offered for some students, not all students could be served. Finally, 16 percent of those responding reported no provision for child care in their programs.

Time in Programs

Fifty-nine percent of students stayed in programs for *less than one year* and over a third remained less than six months. In contrast, *only 11 percent of students remained in programs for more than two years*. These figures are particularly significant in light of the high proportion of teenage mothers who are 16 years of age or younger and who will require at least two years to complete high school.

Participation by Age

Over two-thirds of enrolled students are between the ages of 15 and 17. One student in eight is age 14 years or younger, and 17 percent of students are age 18 or older.

Participation by Ethnicity

Asians constitute 1.9 percent of teen mothers and represent eight percent of pregnant minor/teen mother (PM/TM) program enrollment. *Black teens* account for 15 percent of births to girls younger than age 20 and represent 24 percent of enrollment in PM/TM programs. *Hispanics* account for 42.3 percent of births to females under age 20 and represent 42 percent of enrollment in PM/TM programs. *Whites* account for 37.1 percent of live births to females less than 20 years of age and represent 21 percent of enrollment in PM/TM programs.

Participants by Academic Level

One-third of students were at least one year behind grade level. One student in five was enrolled in college preparatory courses. Only one student in eight was believed likely to graduate from high school on time.

Program Obstacles

Respondents repeatedly listed high levels of *student absenteeism, inadequate transportation between home and school,* and *insufficient child care* as the three greatest program obstacles. Absenteeism was also linked to *insufficient room for child care* and *too few child care hours.* Fewer than one student in five had adequate child care provided by PM/TM programs. Toddler care was rarely available.

Suggested Improvements

Enhanced provision for *child care* and additional support for *transportation services* head the list of suggested improvements. Expanded on-site *counseling and health services* were also frequently mentioned as critical needs.

Live Births

For all age groups, except 14- to 15-year-olds, rates have decreased dramatically since 1970. The only exception is for the very youngest, 10- to 14-year-olds, where the rate increased slowly but continuously. In 1985 approximately 51,700 school-age mothers will live in California. That number is projected to grow to approximately 53,400 by 1992. Even though age-specific birth rates are declining for those age 16 and above, schools should anticipate an increasing demand for teen mother programs.

Unmet Need

Birth rates are increasing for 14- and 15-year-olds, those who have the longest period of time before graduation.

The long decline in student population is coming to an end, and the baby boomlet is now moving into junior high school.

In 1985–86, pregnant minor and teen mother programs enrolled *only 25.8 percent* of the estimated population of 71,700 pregnant minors and teen mothers in California.

Just to *maintain* the current level of services, California will need 800 more "slots" by 1992 to accommodate its youngest mothers' increasing birth rate and larger cohorts.

Additional services for 55,900 students would be required if all students were to receive services.

Costs by Component

Child Care is by far the largest cost component of a comprehensive program, representing on average about *70 percent of the total cost of the program.* Child care costs are extremely variable, and there is no statewide standard cost for child development programs. Some exemplary programs are expensive, while some low-cost programs are exemplary. *The average child development program staffed by credentialled personnel costs $4,000 per child, per school year.* Programs operated by school districts are somewhat more expensive (averaging about $5,000 per child per school year) while those operated by private, non-profit agencies tend to be less expensive.

Program managers estimated that the *student service component* of a comprehensive program would typically cost *$1,000 to $2,000 per student per year.*

Transportation costs are typically the smallest portion of the three cost centers of a comprehensive program. They are, like child care and support services, highly variable. The variation is primarily dependent on the area and type of transportation available. In an urban area with plentiful public transportation, the costs of portal-to-portal transportation may be less than $150 per year; in rural or suburban areas with limited transportation, the costs may be much higher, approaching four to five times that amount. Somewhere *between $500 to $750* appears to be a reasonable estimate, although some respondents noted that if infants were involved, the cost of liability insurance in their areas would become prohibitive.

Aggregate Cost Estimates

Given the degree of program variability, an average cost figure masks the variation in program costs and comprehensiveness. We estimate a cost range of from *$5,000 to $8,000 per student per year*, within which most districts would be able to offer a comprehensive program.

Between $358 million to $574 million dollars per year would be needed tn 1985 to provide comprehensive programs for all eligible students (including those served by SAPID and PM programs) from time of pregnancy to graduation.

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Policy Analysis for California Education

Policy Analysis for California Education, PACE, is a university-based research center focusing on issues of state educational policy and practice. PACE is located in the Schools of Education at the University of California, Berkeley and Stanford University. It is funded by the William and Flora Hewlett Foundation and directed jointly by James W. Guthrie and Michael W. Kirst. PACE operates satellite centers in Sacramento and Southern California. These are directed by Gerald C. Hayward (Sacramento) and Allan R. Odden (University of Southern California).

PACE efforts center on five tasks: (1) collecting and distributing objective information about the conditions of education in California, (2) analyzing state educational policy issues and the policy environment, (3) evaluating school reforms and state educational practices, (4) providing technical support to policy makers, and (5) facilitating discussion of educational issues.

The PACE research agenda is developed in consultation with public officials and staff. In this way, PACE endeavors to address policy issues of immediate concern and to fill the short-term needs of decision makers for information and analysis.

PACE publications include Policy Papers, which report research findings, the Policy Forum, which presents views of notable individuals; and Update, an annotated list of all PACE papers completed and in progress.

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Pregnant and Parenting Minors and California Schools

Report of Survey Results

Introduction

This survey and analysis is part of a larger study, *A Study to Determine How to Organize and Expand Public School Programs to Reduce Dropout Rates for High Risk Students: Pregnant and Parenting Adolescents*, undertaken by the California Senate Office of Research and funded in part by the National Conference of State Legislators and the United States Office of Educational Research and Improvement. The Senate Office of Research contracted with Policy Analysis for California Education (PACE) to examine existing secondary sources such as available records of the California State Department of Education and the California State Department of Health; to conduct a mail survey of junior and senior high schools to estimate the numbers of pregnant minors, adolescent mothers, and associated dropout rates; to conduct a telephone survey of unified and high school districts to identify existing programs, describe existing delivery systems, and solicit suggestions for program improvement; and to assess implementation costs of a comprehensive program.

The report is organized in four sections. Section one reports results from a comprehensive survey of program managers in comprehensive California programs for pregnant and parenting teens. Section two projects unmet need. Section three analyzes currently available cost information and projects statewide costs. Section four summarizes findings.

Section 1
Current California Programs for Pregnant Minors and Teenage Mothers

Survey

During December 1986 and January 1987, telephone interviews were conducted with three of every five head teachers or program managers in California's pregnant minor and teenage mother programs that were identified through a survey (described below) of all school districts. The interviews covered five general topics:

- Program organization
- Program services
- Enrollment patterns
- Student characteristics
- Obstacles to existing programs and suggested program improvements

This section contains an explanation of the survey methodology followed by descriptive results of the survey.

Survey Methodology

Although a partial list of pregnant minor and teenage mother programs was made available to PACE, it became clear that the existing listing, although a substantial improvement over prior efforts, was incomplete. In addition, sampling problems were compounded by the fact that programs were housed in a wide variety of educational and social service institutions with no uniformity in program nomenclature. As a consequence, PACE modified the original survey design and employed a two-step sampling procedure that used a mail survey to locate programs and establish a more comprehensive listing. PACE then followed up with telephone interviews among a large and representative sample to determine program characteristics.

In October 1986, a questionnaire was mailed to each of the state's 1,028 school districts and 58 county offices of education. The questionnaire requested information about the existence of pregnant minor and teenage mother programs. By December 15, 1986, 763 questionnaires had been returned, a return rate of 67 percent. More significantly, the return rate for high school and unified school districts exceeded 90 percent, and since the vast bulk of schools offering services to this population reside in unified and high school districts, this high response rate enabled us to establish a comprehensive list of existing

programs. In addition, to ensure that we had not missed substantial numbers of programs, PACE called a sample of nonrespondents to further assure that the list was indeed comprehensive. We were unable to identify any additional programs by this technique, further assuring us that the list from which we were working was comprehensive. A complete list of programs in the state was created by matching returned questionnaires against a list of programs identified by E.M.D., Inc.

The questionnaire responses enabled PACE to identify 247 programs. In order to make generalizations that could be attributable to the population of programs in their entirety, PACE established a target number of 140 programs, or well over half of those existing. A total of 144 telephone interviews were completed. Interviews were conducted during the school day with each program's head teacher or manager. In less than two percent of the cases, program heads refused to respond to questions. In fact, respondents were eager to discuss their students and programs and cooperated fully with our interviewers. A copy of the telephone questionnaire is included in Appendix A.

The telephone questionnaire was designed in October 1986 and pilot tested in November. Most pilot tests were conducted by telephone, but in order to increase reliability, several face-to-face interviews were also completed. Substantial changes were made in the original questionnaire, primarily because respondents were unable to adequately answer questions about their 1985–86 students, and as the extraordinary variety of current programs became evident, the section of the questionnaire that inquired about program characteristics was expanded.

Reliability of Survey Results

The high response rate to the original questionnaire from high school and unified school districts and the follow-up we completed assures us that the first problem of sampling, that is, identifying the appropriate universe, has been addressed. This rate of return for a mailed questionnaire is quite high. Furthermore, in assessing nonrespondents we discovered that most of the unreturned questionnaires had been sent to rural districts with small enrollments, which because of size are highly unlikely to have programs. It seems likely that if programs were missed through our methodology, the number would be quite small, most likely less than ten.

The second problem normally associated with sampling, that is, the representative nature of the sample itself, is addressed by sampling a large percentage of existing programs representing a cross section of the state. In this case, PACE sampled 144 of the identified 247 programs, or 58.3 percent. The large number of sampled programs and the comprehensiveness of our efforts ensured that those programs contacted for interviews represented a random sample of California schools. Including proportions of rural, suburban, and urban districts as well as large and small districts equivalent to the

nonsampled schools, assures us that the techniques utilized allow us to generalize to the state as a whole.

Survey Results

The survey is organized into five subsections. The first is program organization in which respondents were asked to answer questions best describing their programs (Appendix A, question 1). The second subsection asked respondents to list the services provided in the program, including child care (Appendix A, questions 8 and 9). The third subsection examines types and numbers of students served (Appendix A, questions 2 through 6). The fourth subsection explores student age, course-taking patterns, and ethnicity. The final subsection lists obstacles that interfered with the program and suggestions made for additional services that could be provided with additional resources.

Program Organization

Program heads were asked a general question about how their program was organized. Five[1] organizational patterns were selected:

- Classroom oriented program located in a continuation high school
- Classroom oriented program located in a comprehensive high school
- Classroom oriented program located at its own site
- Pull-out program in a regular or continuation high school
- Case management program operated by another public agency

Of these types, over 90 percent fell into two categories—special day classes and pull-out programs.

Classroom-Oriented Programs. Table 1 lists the program types as well as the percentage of programs and percentage of students enrolled in each type. The first three program types, special day classes located in (1) comprehensive high schools, (2) continuation high schools, and (3) at dedicated sites, cumulatively represent the dominant program type, with over 60 percent of the respondents citing this as the mode that is most descriptive of their programs. Since these programs are similar in program approach, it is appropriate to group them as one category. We estimate that 61 percent of students

1 This item originally included six categories, with the sixth being independent study programs in which students study at home and report to a teacher or counselor. While there may be large numbers of students engaged in independent study, independent study without other components does not constitute a program and was not a part of our sample. Several respondents reported independent study as a part of their overall program.

enrolled in programs are enrolled in special day classes operated in either a comprehensive high school, a continuation high school, or at a dedicated site. Of these, over 80 percent are served in continuation schools or at dedicated sites. It is also important to note that special day classes vary appreciably in size, with day classes operated in comprehensive high schools typically being substantially smaller than those operated in continuation high schools or at dedicated sites.

Pull-Out Programs. The second most prevalent program type listed by 30 percent of respondents mainstreams students into academic classes and provides a special class or classes for one or more periods per day. In these classes, which are generally housed in comprehensive or continuation high schools, pregnant students or students with children normally attend classes with regular students for all but one or two periods per day. During these pull-out periods students learn about child development and parenting, and may be offered counseling services.

The next section will describe program services in five categories: education, health, counseling, transportation, and child care.

Program Services

Table 2 presents information on the variety of services available in these programs. First are educational services. Virtually all programs included *academic instruction, consumer education, nutrition education, child development education, child abuse prevention education,* and *family planning information*. A lesser, but still substantial number of programs (over 80 percent) provided *vocational or employment training* and *alcohol and drug abuse prevention information*. Slightly more than half of the programs included *education for fathers/boy friends*.

Health services were also provided in most programs with *free breakfasts and/or lunches* being provided to program participants in four of five programs and *nutrition supplements* made available to students participating in three of every four programs. In slightly over half of the programs students receive *prenatal medical care* or *medical care for the newborn*.

The second category of services deals with counseling. Four in five programs offered *counseling with a credentialed counselor* and *home visits*. *Support groups* were a feature in 72 percent of the programs. *Adoption counseling, peer counseling,* and *family-based counseling* were services provided in about half of the programs.

The final category of services we examined was transportation and outreach. A little over half of the programs provided *transportation to and from school* either through direct transportation services or through vouchers, but only about one in six had *outreach programs* designed to identify eligible but unserved students.

Child Care has been identified as an essential component of services to adolescent mothers. In programs serving teenage mothers, respondents reported that 71 percent of the programs offered child care services to all the students enrolled. Another 13 percent reported that although child care was offered for some students, not all students could be served. Finally, 16 percent of those responding reported no provision for child care in their programs.

Enrollment Patterns

Table 3 displays the length of time students remain in pregnant minor/teenage mother (PM/TM) programs and summarizes responses to the question, "On average, how long do students remain in your program?" The majority of students, 59 percent, stayed in programs for less than one year; over a third remained less than six months. In contrast, only 11 percent of students remained in programs for more than two years. These figures are particularly significant in light of the high proportion of teenage mothers who are 16 years of age or younger and who will require at least two years to complete high school.

Enrollment in programs for pregnant minors and teenage mothers is presented in Table 4. Program sizes varied substantially. While 11 percent of programs enrolled 15 or fewer students, more than a third—34 percent—enrolled 61 or more students. Two-thirds of the programs enrolled more than 30 students.

Student Characteristics

Tables 5–7 shift the focus away from programs to students. Table 5 displays the estimated distribution of students by age. Over two-thirds of enrolled students are between the ages of 15 and 17. One student in eight is age 14 years or younger, and 17 percent of students are age 18 or older.

The ethnicities of program students are presented in Table 6 and compared with statewide ethnic distributions for teen mothers. Asians constitute 1.9 percent of teen mothers and represent eight percent of PM/TM program enrollment. Black teens account for 15 percent of births to girls younger than age 20 and represent 24 percent of enrollment in PM/TM programs. Hispanic females account for 42.3 percent of births to females under 20 years of age and represent 42 percent of enrollment in PM/TM programs. Whites account for 37.1 percent of live births to females less than age 20 and represent 21 percent of enrollment in PM/TM programs.

Table 7 summarizes the academic background of program participants. Before becoming pregnant, an estimated 16 percent of students had already dropped out. However, since head teachers in teenage mother programs were unlikely to be knowledgeable about their students' prior personal history, the 16-percent figure likely *underestimates* the true proportion of girls who had already dropped out. One-third of

students were at least one year behind grade level. One student in five was enrolled in college preparatory courses. Only one student in eight was believed likely to graduate from high school on time.

The next section examines obstacles to existing programs and suggested improvements if additional resources were to be made available.

Obstacles to Existing Programs and Suggested Improvements

Each respondent was asked two open-ended questions: "What obstacles interfere with your program?" and "If you had resources to expand your program, what services would you improve or add?" Tables 8 and 9 display the most frequently encountered answers to these two questions. Together, these answers provide mirror images of recurrent and mutually reinforcing program impediments as identified by program directors.

A large number of respondents cited inadequate funding as a major problem. Respondents repeatedly listed high levels of *student absenteeism, inadequate transportation between home and school,* and *insufficient child care* as the three greatest program obstacles. These problems appear to be closely linked. For example, the second most frequently requested program improvement was transportation, specifically mini-buses that could provide door-to-door service. Students often were absent because no transportation was provided or because the bus schedules were inconvenient or the stops too far apart. Indeed, many teenage mothers with children were not allowed on conventional school buses because insurance firms would not cover infants or toddlers.

Absenteeism was also linked to *insufficient room for child care* and *too few child care hours*. Fewer than one student in five had adequate child care that was provided by PM/TM programs, and toddler care especially was rarely available. Most programs were housed in conventional classrooms which lacked the kitchens, playgrounds, and play equipment necessary for child care. Repeatedly, respondents argued that additional child care space, materials, facilities, and hours would improve attendance and reduce dropout rates. Many respondents asserted that without improved access to child care, all other proposed program improvements would accomplish little.

Table 8 also lists other program obstacles such as *lack of support from the community members and school authorities, inadequate outreach programs* to identify and recruit unserved students, and grandparents who prefer to keep their children and grandchildren at home.

The responses to the open-ended question displayed in Table 9, "If you had resources to expand your program, what services would you improve or add?" not surprisingly echoed the concerns expressed regarding obstacles. Enhanced provision for *child care* and additional support for *transportation services* head the list. Expanded on-site *counseling*

and *health services* are also frequently mentioned as critical needs. Respondents noted that adolescents in these programs must cope with the stresses and issues confronting regular students but also must adapt to the demands of children, fathers, and grandparents. Many respondents claimed that cutbacks following Proposition 13 had severely reduced the availability of counseling and preventive mental health services that allowed PM/TM students to remain in school. Many teenage mothers have limited access to health care, an important service since both they and their babies become ill more frequently and remain sick longer than older mothers. Respondents argued that increased on-site health services would improve both student and child health and therefore decrease absenteeism.

The next section estimates the current unmet need for programs for pregnant and parenting teens.

Section 2
Determining Unmet Need

Methodology

Unmet need for services has been calculated in the following way. It assumes that all parenting teens between ages 10 and 18 will receive services through pregnancy (until graduation) and corresponds to the comprehensive service level.[2]

The number of students needing, but not receiving, services (the unmet need) is calculated by subtracting the number of students in pregnant minor and teen mother programs in 1985 from the number of parenting teens between the ages of 10 and 18 in California in 1985. The former number was estimated by extrapolating from the numbers of students served in 1985 in surveyed programs to the state as a whole (see Section 1, Survey Methodology). We estimate that approximately 18,500 students received services in 1985. The number of students needing but not receiving services (the unmet need) was estimated in the following manner.

Estimating the Cumulative Population of Teen Mothers

The *total* number of teen mothers between 10 and 18 years old in any year is equal to the sum of the prior year's teen mothers in each age group, minus those who were age 18 the year before, plus the current year's teen mothers in each age group.

$$P_n = (P_{n-1} - P_{n-1}{}^{18}) + B_n{}^{10\text{-}18}$$

where P_n = teen mothers in year n, and $B_n{}^{14}$ = births to 14-year-olds in year n. The calculation must be repeated for a five-year period in order to include girls who became mothers in junior high school. For example, any year's total number of 17-year-old mothers must include 17-year-olds who became mothers when they were 12, 13, and so forth. The number of live births must be adjusted for infant deaths and for second and subsequent births in order to obtain an unduplicated count of teen mothers.

Linked Live Births

Age-specific live births were reduced by the average of annual infant deaths for mothers between ages 10 and 14 for the years (1978–1983) in which data were available. Annual

[2] We focus in this report on programs and services that enable teen mothers to complete high school. Thus, even though 19-7ear-olds are customarily included in statistics reporting populations of teen mothers, we have excluded them from our estimates. In our judgment, an inconsequential number of 19-year-olds attend secondary school.

deaths range between 11 and 24 for the youngest age group (State Department of Health Services, California Birth Cohort: 1978–1983). Data linking infant deaths to births were available for all mothers between ages 15 and 19, but not for individual age cohorts. Therefore, we divided infant deaths equally across cohorts in order to estimate incidence of infant deaths for each cohort.

$$L_n = B_n^{15} - .2(D_n^{15-19})$$

where L_n = live births linked to infant deaths in year n, B_n^{15} = births to mothers 15 years old in year n, and $D_n^{15\text{-}19}$ = infant deaths to mothers in this age group in year n.

Since it is likely that younger mothers experience infant death more frequently than do older mothers, this method underestimates the number of parenting teens between ages 10 and 18, and thus constitutes a conservative estimate of unmet need.

Adjustments for Birth Order

Different proportions of live births were first births in the years for which calculations were made. Births to girls between ages 10 and 14 were assumed to be first births. Births to 15- to 18-year-olds (Department of Health Services, *Vital Statistics of California 1983*, March 1986, Table 2-4) were adjusted by the following rates for the years indicated.

Year	First Birth Rate	Total Birth Rate	Adjustment Factor
1980	41.2	52.0	41.2/52.0
1981	42.1	53.1	42.1/53.1
1982	40.7	52.0	40.7/52.0
1983	39.3	50.6	39.3/50.6

Cumulative Population of Teen Mothers

In 1985, 32,221 babies were born to California mothers between 10 and 18 years of age (Department of Health Services, *Vital Statistics of California 1985*, Table 2-11). Of those, an estimated 580 did not survive the first year, leaving a population of 31,600 infants and teen mothers. About 20 percent of the infants had older siblings. Correcting for birth order, then, we estimate that there were 25,600 new teen mothers in California in 1985. In addition to the new mothers, 26,200 teens who became mothers for the first time

in earlier years were still of school age. The cumulative population of teen mothers in 1985 is estimated to be 51,700.

Accounting only for teen mothers seriously underestimates the number of teens who need services in any given year. Programs, after all, are intended for pregnant *and* parenting teens, not merely those who are parents. Unfortunately, the number of pregnant teens is difficult to estimate.[3]

At the least, we must account for teens who become pregnant in one year and give birth in the following year. In any one calendar year, under normal circumstances, only those who become pregnant in January, February, or March will be both pregnant and parenting in the same year. All others are appropriate clients for Pregnant Minor/Teen Mother programs in both years. In 1985, then, the client group would include both those who gave birth in 1985 and 75 percent of those giving birth in 1986 (i.e., 75 percent of 33,000 = 25,000). But only 80 percent of births to mothers between ages 15 and 18 are *first* births, so corrected for birth order, the additional client group numbers 20,000.

The total client population for PM/TM programs in 1985, then, is the cumulative sum of teen mothers between 10 and 18 years of age (51,700) and pregnant teens in the same age groups (20,000), or 71,700 individual teens.

Unmet Need

The extent of unmet need depends on the anticipated level of services. If California intends to assist teen mothers from pregnancy to graduation, then all students not now in special programs for pregnant and parenting teens constitute the group requiring services. In 1985–86, approximately 18,500 students received services in pregnant minor, teen parent, and School Age Parent and Infant Development (SAPID) programs. (Some of these same students received services from Adolescent Family Life (AFL), programs funded through the Maternal and Child Health Branch of the Department of Health Services. To avoid duplication, AFL clients are not included in the estimated 18,500 students who receive services, unless they also attend other programs.) In addition, these AFL programs served students who were not in school. There are approximately 4,500 clients currently served by AFL programs. As we have demonstrated, approximately 71,700 pregnant and parenting teens lived in California in 1985. Additional services for 53,200 students would be required if *all* students were to receive services.[4]

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[3] Another large group deserves notice —hose pregnant teens whose pregnancies, for whatever reason, do not result in live births. Although information about this group is less than precise, teens who experience a pregnancy which does not culminate in live birth, may require services both to avoid another pregnancy and to complete school. For the purposes of this paper, we are focusing on those teens whose pregnancies do culminate in live births.

[4] If California provides services to pregnant teens for a minimum length of time during their pregnancy and for three months after delivery, as most programs currently do, then services for an additional 7,000 girls would have been required in 1985.

Summary of Unmet Need
1985

Teen Mothers	51,700
Pregnant Teens	20,000
Total	71,700
PM/SAPID Served	-18,500
Unmet Need	53,200

Current Patterns of Live Birth Rates

As has been characteristic of California for some time, live birth rates for teen mothers varied widely among California counties in 1984, the most recent year for which live birth data has been published. This dramatic variation suggests that statewide aggregates often mask substantial county-by-county differences. In 1984, 14 of 58 counties reported no live births to girls age 14 and under, and another 17 reported fewer than five. In 15 counties, however, the live birth rate exceeded California's rate of 1.1 live births per thousand girls between 10 and 14 years old. In two counties, the rate was more than two times the state average and in one county, four times the state average.

For 15-year-olds, the live birth rate for California was 13.4 per thousand. For that age group, eight counties reported no births, 16 reported fewer than five, and 21 reported rates higher than that of the state as a whole. While the live birth rate for 15-year-olds was 12 times greater than for 14-year-olds, the rate for 16-year-olds—31 per thousand—was two-and-a-half times that of their schoolmates one year younger. Only two counties reported no births to 16-year-olds, while 11 reported fewer than five. Twenty-two counties reported birth rates higher than the state live-birth rate for 16-year-olds.

For every one hundred 17-year-old females, five became mothers in 1984. Only one county reported no births to 17-year-olds; seven reported fewer than five, and 24 reported a live-birth rate lower than the state's. For 18-year-olds, the live birth rate was 66.2 per thousand; one county reported no live births, and three reported fewer than five. As the accompanying figure displays, 26 counties' rates exceeded this age group's state rate.

- In 1984, 18 of California's 58 counties (31%) reported birth rates higher than the state's in at least three of the five age groups for school-age teen mothers, 10–14, 15, 16, 17, and 18.

- Forty percent of live births to Californians 10–14 years old and 37 percent of births to 15-year-olds occurred in Los Angeles County. By comparison, 33 percent of California's female 10- to 14-year-olds and 32 percent of its 15-year-olds live in Los Angeles County.

Age-Specific Live Birth Rates[5]
California, 1984
Age of Mother

	10–14	15	16	17	18
California	1.1	13.4	31.0	50.3	66.2

Number of Counties

0 births	14	8	2	1	1
< 5 births	17	16	11	7	3
> state rate	15	21	22	23	26

- In four counties (Amador, Modoc, Trinity, and Tuolumne) the birth rate was too low to be calculated for teens age 17 and younger, but it approached the state average for 18-year-olds.

- Only four counties (Alpine, Mariposa, Mono, and Sierra) reported five or fewer births to girls age 18 or younger in 1984.

- In six counties (Alameda, Humboldt, Nevada, San Francisco, San Luis Obispo, and Santa Barbara) younger teens were more likely to have babies than in the state as a whole, but older teens were increasingly less likely to do so. In San Francisco for the last five years, for example, births to 14- and 15-year-olds exceeded the state rate but for 16- to 18-year-olds were progressively lower than the state's.

- The distribution of live births to California teenagers by race of mother in 1984 was 42.3 percent white Hispanic, 37.1 percent white non-Hispanic, 15.0 percent black, 3.1 percent other, 1.9 percent Asian, and 0.4 percent not stated

[5] Age-specific live birth rates are per 1,000 females in specified age groups. Source: California Department of Health Services, Health Data and Statistics Branch, *Live Births by Age of Mother, California Counties, 1970–1984, August 1986. Age Specific Live Birth Rates. California Counties, 1970–84,* A ugust 1986.

> (Department of Health Services, "General Fertility Rates and Age Specific Live Birth Rates by Age of Mother, California Counties 1984," November 1986).

How have age-specific live birth rates changed over time? For all age groups, except 14- to 15-year-olds, rates have decreased dramatically since 1970. For example, in 1970 there were 36.8 live births per thousand 16-year-olds, while in 1984 the rate was 31 per thousand, a difference of 1,025 live births, corrected for differences in cohort size. For 18-year-olds, the rate was 100 per thousand in 1970 and 66.2 in 1984. During the 15-year period, rates fluctuated for all age groups but declined more frequently than increased. The only exception is for the very youngest, 10- to 14-year-olds, where the rate increased slowly but continuously. The Department of Health Statistics reported the birth rate actually increased 10 percent for this age group between 1983 and 1984:

> In 1984 the number of live births to California women 10–14 years of age increased from 853 in 1983 to 927, an increase of 8.7 percent. The age-specific population for this group decreased from 886,900 women in 1983 to 867,185 women in 1984. With the decrease of 2.2 percent in the population size and the increase of 8.7 percent in the number of births, the ASBR increased 10.0 percent over the 1983 rate of 1.0 to 1.1 in 1984 . . . (Department of Health Services, Health Data and Statistics Branch, November 1986)

Projected Patterns of Teen Parenting

Using 1970 as the base year, and projecting birth rates for 1985 to 1992, births rates decline noticeably. Using 1980 as the base year (thereby weighting recent experience more heavily), rates decline more slowly. Although birth rates for all but the youngest teens have declined steadily in the past decade, a more conservative assumption of a slower decline in birth rates appears to be justified because the proportion of the childbearing population is increasingly composed of recent immigrants from Latin America and Southeast Asia.[6] The number of immigrants continues to increase; the newcomers also demonstrate higher rates of fertility than more established groups. Both immigrant groups contain a large proportion of people from rural areas, who traditionally have larger families and begin childbearing at younger ages. Births to girls of Hispanic and Southeast Asian origin can be expected to remain high, offsetting lower birth rates in other groups.

Although political conditions in war-torn nations are unlikely to stabilize sufficiently in the near term to affect the magnitude of migration to the United States, the new U.S. immigration law may slow the rate of increase. As a result, age-specific birth rates may

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[6] Birth rates from 1985 to 1992 for each age cohort were estimated using a seven year rolling average of age-specific birth rates for 1980 to 1986. The number of females in each age cohort from 10 to 18 (California Department of Finance, Annual Population Projections, 1986) was multiplied by age-specific birth rates to obtain the projected number of live births. Projections were reduced for infant deaths and birth order as previously described to obtain the estimated number of teen mothers in future years.

decline as the proportion of Hispanics in each age group increases less rapidly than in the recent past.

Using projected birth rates and the Department of Finance's cohort population projections, we estimate that in 1990, when the population of females between ages 10 and 18 is at its lowest point, approximately 51,500 school-age mothers will live in California. An additional 19,400 pregnant teens will be part of the total client population of 70,900 pregnant and parenting teens. By 1992, because of an increase in the population of females between ages 10 and 18, the number of school-age mothers is projected to grow to 53,400 and the number of pregnant teens to 21,000, bringing the total client population to 74,400.

Estimated Client Population
1992

Teen Mothers	53,400
Pregnant Teens	21,000
Total	74,400

Even though age-specific birth rates are declining for those age 16 and above, schools should anticipate a continuing demand for teen mother programs.

- Birth rates are increasing for 14- and 15-year-olds, those who have the longest period of time before graduation.

- The long decline in student population is coming to an end, and the baby boomlet is now moving into junior high school. The impact of that group will begin to be felt in 1989. By 1992 the female population between ages 10 and 14 will be 25 percent larger than the same cohort in 1985.

- In 1985–86, pregnant minor and teen mother programs enrolled only 25.8 percent of the estimated population of 71,700 pregnant minors and teen mothers in California.

- To *maintain* the current level of short term services, California will need 800 more "slots" by 1992 to accommodate its youngest mothers' increasing birth rate and larger cohorts.

- Using the same assumptions, 74,400 pregnant and parenting teens between 10 and 18 will live in California in 1992.

- Political pressures that currently restrict provision of birth control information and devices to elementary and junior high girls will not likely be resolved in the intervening period. Thus, it is reasonable to assume that births to the very youngest

members of the fertile group will continue to increase, both absolutely and as a percent of the age group. The number of second and subsequent births would be likely to decline, on the other hand, if teen mothers received more support in completing school.

Section 3
Projecting Program Costs

Methodology

PACE used preliminary information from the California Child Care Resource and Referral Network survey of costs of child care (1987), a telephone survey of a representative sample of program managers, and discussions with a small number of school district business managers. There are two central conclusions to be drawn from our review of available cost information about programs for pregnant minors and teen mothers: (1) costs are extremely variable on virtually every dimension, and (2) neither the State Department of Education nor school program directors nor school business officials have reliable cost information about these programs. Problems in gaining reliable and useful estimates are caused by a variety of factors:

1. Programs budget their activities and services in idiosyncratic ways; therefore, reported costs from program to program are rarely comparable.

2. In-kind contributions from a wide array of sources including private, non-profit and tax-funded health and social welfare services were incorporated extensively in virtually all programs we contacted. The amount of these in-kind contributions, which were in many cases substantial, was difficult to assess and when reported, was not done so in a uniform way.

3. Since 1981–82, state funding for pregnant minor programs was incorporated within the district's revenue limit, making it virtually impossible at either the state or local level to track the resources available for them.

4. For the most part, program managers were unable to answer specific questions about their program costs, and even more unable to determine revenue sources. While they were very knowledgeable about their programs, they had little sense of the total funding picture

5. The business managers we talked with were unable to provide us with specific information about the relative program components. District budgets most frequently do not deal with that level of detail.

6. The tremendous variation in the types of services offered and the levels of service provided was also a substantial problem in making generalizations about program costs. Costs varied on almost every conceivable dimension: region, size,

in-kind contributions, district contribution, availability of public transportation, proximity to other resources, and most particularly by the degree or the level of service provided.

7. The often unique situational interaction of program components added to the difficulty in making generalizations about program costs. For example, although school-based child-care centers tend to be more expensive than centers located in nonschool settings, locating centers on school campuses often results in a reduction in home-to-school transportation.

8. The variety of delivery systems and revenue sources further complicates the picture. The three state-funded programs for pregnant minors and teen mothers are funded in two different ways: from each district's general fund or by categorical or competitively awarded grants.

Pregnant minor programs, known by various names throughout California, are funded from school district revenue limits, general fund revenue each district receives per student day of attendance. Independent study programs, sometimes known as home and hospital programs, provide another way for young parents to obtain an education. Like PM/TM programs, independent study is funded by revenue limits.

School Age Parenting and Infant Development (SAPID), administered by the State Department of Education, has been awarded by competitive process to 61 districts. SAPID grants provide start-up funding, parenting classes, counseling and child care located at school sites. SAPID programs are frequently child development labs in which both parenting and nonparenting students study child development, parenting education, and child care methods. SAPID provides a comprehensive program for enrolled students, who may remain with the program, in some cases, until graduation or age 21. Most SAPID programs allow the mother to remain until her child is two years old.

AFL programs, administered by the Maternal and Child Health Branch of the Department of Health Services, were also awarded by a competitive process to 30 California programs. AFL is a case management program that assists teen parents in obtaining a multitude of services from many agencies, including school systems. AFL programs are administered by a variety of agencies, including school districts, private programs, and county health departments. They are intended to leverage funds from a variety of sources to assist teen mothers.

Although there were difficulties in getting relevant and accurate cost information from the sites, there was no similar problem in getting the respondents to agree on the most important and expensive components of comprehensive programs: child care, support services, and transportation. The next section examines those cost centers.

Program Cost Centers

There are essentially two major variables that affect costs for programs for pregnant minors and teen parents. The first is the time spent in the program. Ideally, students would stay in a program from time of pregnancy to graduation from high school. On the other hand, if the state provides services to pregnant teens for a minimum length of time during their pregnancy and for three months after delivery, as most programs currently do, then the number of students annually being served is substantially less. PACE estimates that for 1985–86 under the first assumption, program services would be required for an additional 55,900 students. However, if the programs are only for the minimal period of time, the additional students annually needing to be served is 7,000.

The second major cost determinant is the comprehensiveness of the program. Comprehensive programs provide child care, support services, and transportation services for pregnant and parenting teens. Programs that provide these important services tend to have a higher school retention rate. Programs that do not provide these three services wish they did.

Before we examine these areas of service, a caveat is in order. Underlying this discussion is the assumption that if programs for pregnant minors and teen mothers contribute to a reduction in the high school dropout rate, education expenditures will increase by virtue of the additional average daily attendance generated by students who return to high school and remain there. We are concerned here with costs incurred over and above the cost associated with the delivery of the regular school curriculum.

Child Care

Child care is by far the largest cost component of a comprehensive program, representing on average about 70 percent of the total cost of the program. Child care costs are extremely variable and there is no statewide standard cost for child development programs; some exemplary programs are expensive, while some low-cost programs also are exemplary. The average child development program staffed by credentialled personnel costs $4,000 per child per school year. Programs operated by school districts are somewhat more expensive (averaging about $5,000 per child per school year) while those operated by private, nonprofit agencies tend to be less expensive. Quality child development programs, although relatively expensive, are reported by respondents to our survey to be essential components in successful programs. They reported that if programs are to offer maximum support for school completion, child development centers should be located on or very near the school mothers attend. This reduces home-to-school transportation costs and reduces family stress associated with long trips with small babies. Most importantly, respondents noted, adequate convenient child care relieves a major worry that inhibits regular school attendance as well as school performance.

Although quality child development costs appear high, they are also cost effective. David Weikert of High/Scope Foundation in Ypsilanti, Michigan, demonstrated the long-term cost effectiveness of comprehensive child development programs. For 18 years Weikert and his team of investigators followed matched samples of children identified at three years old as being at-risk of school failure. One group received no preschool services. The others were enrolled in comprehensive programs. Children who participated in the comprehensive program were healthier, graduated from high school at substantially higher rates, and attended college significantly more frequently than children who had not participated. Participants were significantly less likely to require special education, had fewer encounters with the law, and became teen mothers less frequently.

Support Services

Support services typically include case management; personal, family, and career counseling; health services; and nutrition. The availability of support services varies widely from program to program and area to area. In the programs we surveyed, support services are generally provided in two ways: either through school-based programs, including SAPID, or through separately funded case management programs. Some individual teachers we interviewed provided support services within the context of their parent education programs and without special funding. This is not always the case, however, and respondents noted that a more formal program can better ensure that program participants can continue and hopefully complete their education. Several of the districts we contacted noted the effectiveness of the Adolescent Family Life Program (AFL), funded through the State Department of Health and created to provide case management services for teens from pregnancy to high school graduation or even beyond. AFL programs typically operate in close conjunction with schools and other community service agencies to focus and coordinate resources on this high-risk group of teenagers.

Support service costs are highly variable, depending on a large number of factors, including program size, prevailing wage rates, extent of services, and cost of living. Costs associated with support services are difficult to estimate as well. Many programs, SAPID for instance, provide support services within the context of the program and ordinarily do not analyze the portion of their expenditures devoted to these activities. In addition, support services also include in-kind donations of space and personnel that are difficult to assess. Program managers estimated that the student service component of a comprehensive program would typically cost $1,000 to $2,000 per student per year.

Transportation

Respondents noted that portal-to-portal transportation led to markedly improved attendance rates. They also reported that in those cases in which districts opted (because of financial problems) to reduce transportation expenditures, attendance in their programs subsequently fell. Respondents overwhelmingly reported that transportation was an

essential component of a high-quality comprehensive program and that its absence severely curtailed access to these programs.

Transportation costs are typically the smallest portion of the three cost centers of a comprehensive program. They are, like child care and support services, highly variable. The variation is primarily dependent on the area and type of transportation available. In an urban area with plentiful public transportation, costs of portal-to-portal transportation may by less than $150 per year; in rural or suburban areas with limited transportation, costs may be much higher, approaching four to five times that amount. Somewhere between $500 to $750 appears to be a reasonable estimate, although some respondents noted that if infants were involved, the cost of insurance in their areas became prohibitive.

State Costs of Comprehensive Programs

Adding the three cost components, a typical comprehensive program would cost somewhere between $5,000 and $8,000 per student per year. The problem, of course, is that few programs appear to be typical. The most striking generalization one can make about these programs is their variability. Some specific examples can serve to illuminate this finding.

Programs we contacted provided child care in a variety of ways. In one small program located in a suburban area, babies who are not yet crawling are cared for in part of the mothers' classroom. A classified, rather than certificated, worker cares for the infants while mothers attend school. Licensing regulations permit this arrangement because mothers and a certificated teacher are in the same room with the infants. There is no provision for child care after babies begin crawling, however. Another school-based program in a rural northern area provides child care in a portable on the school site, once again with classified personnel. As with the program previously described, the district's revenue limit covers costs for both child care and the student's education. Respondents noted that a limited program of child care is preferable to a program located away from the school site, and certainly preferable to no child care program at all. However, neither is optimal. The first program does not ensure the service component most highly associated with school completion: child care until graduation. The second does not provide for one of the benefits of an on-site comprehensive child development program frequently mentioned by program managers: an on-site laboratory for parenting education.

One program we contacted provided continuity between its transportation component and its child care program. The same individuals drove the programs' school buses and worked as aides in the child development center. Certificated staff provided planning and educational programs. The same level of service was provided in another program serving students from several high school districts. Part-time professionals provided their special

expertise: a community worker and a registered nurse assisted parent education teachers and a child-care worker in a multi-funded child development program to provide comprehensive services. In that program, the Regional Ocupational Program provided portal-to-portal transportation, because students also enrolled in business education. Yet another child development program was more traditionally organized and self-contained. Located on the high school campus, it was conducted by full-time credentialed teachers, who, for the most part, worked independently of district and site administrators. Students in that program obtained support services from a local Adolescent Family Life program, which also provided transportation vouchers.

It should be noted at the outset that given the kind of program variability described above, establishing an aggregate cost figure based on the average would mask the variation in program cost and comprehensiveness at the site. We have opted to estimate a range of from $5,000 to $8,000 per student per year, within which most districts would be able to offer a comprehensive program.

Between $358 million to $574 million dollars per year would be needed in 1985 to provide comprehensive programs for all eligible students (including those served by SAPID and PM programs) from time of pregnancy to graduation.

Section 4
Summary of Findings

Highlights of our findings include:

Program Types

Sixty-one percent of students enrolled in pregnant minor and teen mother programs are enrolled in *classroom-oriented programs* operated in either a comprehensive high school, a continuation high school, or at a dedicated site. Of these, over 80 percent are served in continuation schools or at dedicated sites.

The second most prevalent program type, *pull-out programs*, includes approximately 30 percent of the students, mainstreams students into academic classes, and provides a special class or classes for one or more periods per day. In these classes, which are generally housed in comprehensive or continuation high schools, pregnant students or students with children normally attend classes with regular students for all but one or two periods per day.

Educational Services

Virtually all respondents reported that their programs included *academic instruction, consumer education, nutrition education, child development education, child abuse prevention education,* and *family planning information.* A lesser, but still substantial number of programs (over 80 percent) reported providing *vocational or employment training* and *alcohol and drug abuse prevention information.* Slightly more than half of the programs include *education for fathers/boy friends.*

Health Services

Health services were also provided in most programs with *free breakfasts and/or lunches* being provided to program participants in four of five programs. *Nutrition supplements* were made available to students participating in three of every four programs. In slightly over half of the programs students receive *prenatal medical care* or *medical care for the newborn.*

Counseling

Four in five programs offered *counseling with a credentialed counselor* and *home visits* as part of their program. *Support groups* were a feature of 72 percent of the programs.

Adoption counseling, *peer counseling*, and *family-based counseling* were services provided in about half of the programs.

Transportation

A little over half of the programs provided *transportation to and from school* but only about one in six had *outreach programs* designed to identify eligible but unserved students.

Child Care

In programs serving teenage mothers, respondents reported that 71 percent of the programs offered child-care services to all the students enrolled. Another 13 percent reported that although child care was offered for some students, not all students could be served. Finally, 16 percent of those responding reported no provision for child care in their programs.

Time in Programs

Fifty-nine percent of students stayed in programs for *less than one year* and over a third remained less than six months. In contrast, *only 11 percent of students remained in programs for more than two years*. These figures are particularly significant in light of the high proportion of teenage mothers who are 16 years of age or younger and who will require at least two years to complete high school.

Participation by Age

Over two-thirds of enrolled students are between the ages of 15 and 17. One student in eight is age 14 years or younger, and 17 percent of students are age 18 or older.

Participation by Ethnicity

Asians constitute 1.9 percent of teen mothers and represent eight percent of pregnant minor/teen mother (PM/TM) program enrollment. *Blacks* account for 15 percent of births to girls younger than age 20 and represent 24 percent of enrollment in PM/TM programs. *Hispanics* account for 42.3 percent of births to females under 20 years of age and represent 42 percent of enrollment in PM/TM programs. *Whites* account for 37.1 percent of live births to females less than age 20 and represent 21 percent of enrollment in PM/TM programs.

Participants by Academic Level

One-third of students were at least one year behind grade level. One student in five was enrolled in college preparatory courses. Only one student in eight was believed likely to graduate from high school on time.

Program Obstacles

Respondents repeatedly listed high levels of *student absenteeism, inadequate transportation between home and school,* and *insufficient child care* as the three greatest program obstacles. Absenteeism was also linked to *insufficient room for child care* and *too few child care hours*. Fewer than one student in five had adequate child care provided by PM/TM programs. Toddler care was rarely available.

Suggested Improvements

Enhanced provision for *child care* and additional support for *transportation services* head the list of suggested improvements. Expanded on-site *counseling* and *health services* were also frequently mentioned as critical needs.

Live Births

For all age groups, except 14- to 15-year-olds, rates have decreased dramatically since 1970. The only exception is for the very youngest, 10- to 14-year-olds, where the rate increased slowly but continuously. *In 1991–92 approximately 53,400 school-age mothers will live in California.* Even though age-specific birth rates are declining for those age 16 and above, schools should anticipate a continuing demand for teen mother programs.

Unmet Need

Birth rates are increasing for 14- and 15-year-olds, those who have the longest period of time before graduation.

The long decline in student population is coming to an end, and the baby boomlet is now moving into junior high school.

In 1985–86, pregnant minor and teen mother programs enrolled *only 25.8 percent* of the estimated population of 71,700 pregnant minors and teen mothers in California.

Just to *maintain* the current level of services, California will need 800 more "slots" by 1992 to accommodate its youngest mothers' increasing birth rate and larger cohorts.

Additional services for 55,900 students would be required if all students were to receive services.

Costs by Component

Child Care is by far the largest cost component of a comprehensive program, representing on average about *70 percent of the total cost of the program.* Child care costs are extremely variable, and there is no statewide standard cost for child development

programs. Some exemplary programs are expensive, while some low-cost programs are exemplary. *The average child development program staffed by credentialled personnel costs $4,000 per child per school year.* Programs operated by school districts are somewhat more expensive (averaging about $5,000 per child per school year) while those operated by private, nonprofit agencies tend to be less expensive.

Program managers estimated that the *student service component* of a comprehensive program would typically cost *$1,000 to $2,000 per student per year.*

Transportation costs are typically the smallest portion of the three cost centers of a comprehensive program. They are, like child care and support services, highly variable. The variation is primarily dependent on the area and type of transportation available. In an urban area with plentiful public transportation, the costs of portal-to-portal transportation may be less than $150 per year; in rural or suburban areas with limited transportation, the costs may be much higher, approaching four to five times that amount. Somewhere *between $500 to $750* appears to be a reasonable estimate, although some respondents noted that if infants were involved, the cost of liability insurance in their areas would become prohibitive.

Aggregate Cost Estimates

Given the degree of program variability, an average cost figure masks the variation in program costs and comprehensiveness. We estimate a cost range of from *$5,000 to $8,000 per student per year*, within which most districts would be able to offer a comprehensive program.

Between $358 million to $574 million dollars per year would be needed in 1985 to provide comprehensive programs for all eligible students (including those served by SAPID and PM programs) from time of pregnancy to graduation.

TABLE 1

Percent of Students Enrolled in California Programs for Pregnant Minors and Teenage Mothers: Distribution by Program Type, 1985-86 School Year

Program Type	Percentage of Programs	Percentage of Students in Program
Students Attend a Classroom-Oriented Program Located at a Comprehensive High School	25	13
Students Attend a Classroom-Oriented Program Located at a Continuation High School	13	26
Students Attend a Classroom-Oriented Program Located at a Dedicated Site	24	24
Students are Mainstreamed for Academic Classes but Attend Pregnant Minor or Teenage Mother Classes One or More Periods per Day	30	29
Students Participate in Case Management Programs Not Operated by Public Schools	1	2
Students Participate in Program Not Listed Above	7	7

TABLE 2

Services Provided by California Programs for Pregnant Minors and Teenage Mothers, 1985-86 School Year

	Services Provided	Percentage of Programs Providing the Services
Educational:	Academic Instruction	96
	Vocational/Employment Training	83
	Nutrition Education	98
	Consumer Education	95
	Family Planning Information	93
	Alcohol and Drug Abuse Prevention Information	88
	Child Development Education	99
	Child Abuse Prevention Education	98
	Instruction to Fathers/Boy Friends	56
Health:	Nutrition Supplements	75
	Free Breakfasts and/or Lunches	81
	Prenatal Medical Care	47
	Newborn Medical Care	46
Counseling:	With a Credentialed Counselor	78
	Peer Counseling	50
	Support Groups	72
	Family-based Counseling	44
	Adoption Counseling	56
	Home Visits	79
Transportation:	To and from School	52
	Outreach to Eligible Students	17

TABLE 3

Length of Time Students Remain in California Programs for Pregnant Minors and Teenage Mothers, 1985-86 School Year

Length of Time	Percentage of Students
1 to 6 months	34
7 to 12 months	25
13 to 18 months	10
19 to 24 months	20
more than 24 months	11

TABLE 4

Enrollment Sizes of California Programs for Pregnant Minors and Teenage Mothers, 1985-86 School Year

Enrollment Size	Percentage of Programs
11 to 15	11
16 to 30	22
31 to 60	33
61 or more	34

TABLE 5

Estimated Percent of Students Enrolled in California Programs for Pregnant Minors and Teenage Mothers: Distribution by Age, 1985-86 School Year

Age	Percentage of of Students in Program
age 14 or younger	13
age 15 to 17	70
age 18 or older	17

TABLE 6

Percent of Students Enrolled in California Programs for Pregnant Minors and Teenage Mothers: Distribution by Ethnicity, 1985-86 School Year

Ethnicity	Percentage of Students in Program	Percentage of Teen Mothers
Asian	8	1.9
Black	24	15.0
Hispanic	42	42.3
White	21	37.1
Other	5	3.5

TABLE 7

Academic Backgrounds of Students Enrolled in California Programs for Pregnant Minors and Teenage Mothers, 1985-86 School Year

Academic Characteristics	Percentage of Students in Program
Students had already dropped out of school before becoming pregnant	16
Students one or more years behind grade level	32
Students enrolled in a college prep program	19
Students considered likely to graduate from high school on time	13

TABLE 8

Responses to the Question:

What Obstacles Interfere With Your Program?

Responses	Obstacle
39	funding level too low
39	inadequate transportation between home and school
28	insufficient room for child care
26	high level of student absenteeism
26	not enough child care
19	public apathy and lack of community support
12	unavailability of birth control
11	no outreach program for unserved students
6	unsupportive school administrators
6	inadequate food
3	unmotivated students
3	grandparents who want children/grandchildren home
3	language barrier

TABLE 9

Responses to the Question:

If You Had Resources to Expand Your Program, What Services Would You Improve or Add?

Number of Respondents	Area of Improvement
67	provide more child care
43	provide more transportation
37	add more physical space for child care
36	provide expanded counseling services
35	increase on-site health services
27	have more teachers and/or aides
23	include counseling for pregnancy prevention
20	offer more parenting and child development classes
19	purchase more instructional materials
19	offer home visits
16	offer more services for fathers
14	provide a continuous program through graduation
13	offer more career counseling and vocational instruction
12	extend outreach
5	add play equipment for children

APPENDIX A

PACE
Survey of California Programs
for Pregnant Minors and Parenting Teens
December, 1986

Program Code _____ *Interviewer* _____

Contact Person _____ *Date* _____

Primary Telephone Number ___ ___ ____ *Alternate Number* ___ ___ ____

Program Name _____

Program Address _____

_____

Hello, I'm _____ with the University of California at Berkeley. I would like to ask you the questions that were contained in the letter. The questions will take about ____ minutes. Is now a convenient time? *If not, ask for a callback time.* _____

_____

1. First, I would like to ask you a general question about how your program is organized. Which of the following descriptions best fits your program?

___ a. a classroom oriented program located at a continuation high school

_____

_____

___ b. a classroom oriented program located at a regular high school

_____

_____

___ c. a classroom oriented program with its own site

_____

_____

___ d. a pull-out program for students in a regular or continuation high school (*students are mainstreamed for the majority of the day but attend classes for one or more periods*)

_____

_____

___ e. an independent study program in which students study at home and report on a regular basis to a public school teacher and/or counselor

_____

_____

___ f. a case management program operated by some public agency other than a school district or county office of education

_____

_____

___ g. other _____

_____

___ *h. Use this space to describe combination programs and include numbers which preceed each type of program listed above*

_____

2. Does your program serve pregnant minors? *yes*___ *no* ___

3. Does your program serve teen-age mothers? *yes*___ *no* ___
If yes, how long after delivery are mothers eligible to be in your program?

4. On average, about how long do girls stay in your program? _____

5. a) Does your program monitor and/or support students until they have completed high school? (*Distinguish between occasional monitoring by previous teachers and formal programs in which all students are routinely monitored and necessary support offered. Use the space below to describe formal programs.)*
*yes*___ *no* ___

6. I would like to ask you some questions about the number of girls in your program. *(If the respondent manages two or more programs, ask her to report combined numbers.)*

a. How many girls are currently enrolled in your program? _____

b. How many girls participated in your program last year? _____

c. Do you have the capacity to serve more girls? *yes*___ *no* ___
If yes, how many? _____

d. Are you aware of girls in your area who could participate in your program but do not?
*yes*___ *no* ___ *If yes*, how many would you estimate? _____

7. Now I would like to ask you some questions about the girls who participate in this year's program.

a. How many of this year's students were aged14 years or younger? _____

b. How many of this year's students were aged 18 years or older? _____

c. How many of this year's students were one or more years behind grade level? ____

d. How many of this year's students were in a college prep program? _____

e. How many of this year's students had already dropped out of school before becoming pregnant? _____

f. How many of this year's students do you think will graduate on time from high school?
_____

g. How many of this year's students would describe themselves as Asian? _____

h. How many of this year's students would describe themselves as black? _____

i. How many of this year's students would describe themselves as Hispanic? _____

j. How many of this year's students would describe themselves as white? _____

k. How many of this year's students have more than one child? _____

l. How many of this year's students do you expect will place their children for adoption? _____

8. Now I would like to ask you some questions about the services girls receive in your program. Does your program provide: (*If yes*, probe sub-heads)

a. academic instruction	*no __ yes __ / direct __ refer __*
b. vocational/employment training	*no __ yes __ / direct __ refer __*
c. educational and career guidance	*no __ yes __ / direct __ refer __*
d. parenting education	*no __ yes __ / direct __ refer ___*
___child development	*no __ yes __ / direct __ refer ___*
___child abuse prevention	*no __ yes __ / direct __ refer ___*
___consumer skills	*no __ yes __ / direct __ refer ___*
e. family planning information	*no __ yes __ / direct __ refer __*
f. health services	*no __ yes __ / direct __ refer __*
___ alcohol and drug abuse prevention/intervention	*no __ yes __ / direct __ refer __*
___ nutrition education	*no __ yes __ / direct __ refer __*
___ nutrition supplements	*no __ yes __ / direct __ refer __*
___ free breakfasts and lunches	*no __ yes __ / direct __ refer _*
___ prenatal medical care	*no __ yes __ / direct __ refer __*
___ newborn medical care	*no __ yes __ / direct __ refer __*
g. individual counselling	*no __ yes __ / direct __ refer __*
___ with a credentialed counselor	*no __ yes __ / direct __ refer __*
___ peer counselling	*no __ yes __ / direct __ refer __*
___ support groups	*no __ yes __ / direct __ refer __*
___ family-based counselling	*no __ yes __ / direct __ refer __*
___ adoption counselling	*no __ yes __ / direct __ refer __*
h. services to fathers/boy friends	*no __ yes __ / direct __ refer __*
i. home visits	*no __ yes __ / direct __ refer __*

j. transportation to and from school *no __ yes __ / direct __ refer __*
___ by bus
___ with vouchers

k. seek out students who are eligible for the program (*outreach*)
___ students who are currently enrolled *no __ yes __ / direct __ refer __*
___ students who have dropped out *no __ yes __ / direct __ refer __*

l. Are there any services you provide which have not already been described?

Ask only for teenage mother programs

9. I would like to ask you some questions about child care.

a. For approximately what percent of your students does your program provide child care?
_____ *percent. If not 100%, go to b.*
b. If a student does not find child care in your program, where does she find child care?

c. Has a lack of child care ever prevented a student from participating in your program?
yes ___ no ___
d. *Ask only if response to c. was yes.* Approximately how many times has this occurred in the past year? _____

11. What obstacles interfere with your program?

12. If you had resources to expand your program, what services would you improve or add?

13. Do you have any questions you'd like to ask me?

Thank you for taking the time to answer these questions. Your contributions will help state legislators improve services for your students.